

**Amendments to the Claims:**

1. (Currently amended) A method for treating a patient having a cancer with a combination therapy, comprising:

administering to said patient a therapeutically effective amount of a DNA methylation inhibitor that is 5-azacytidine or decitabine at a dose ranging from 1 to 50 mg/m<sup>2</sup> per day, in combination with a therapeutically effective amount of a histone deacetylase inhibitor selected from the group consisting of hydroxamic acid, cyclic peptide, benzamide, butyrate and depudecein, trichostatin A, suberoylanilide hydroxamic acid, oxamflatin, suberic bishydroxamic acid, m-carboxy-cinnamic acid bishydroxamic acid, pyroxamide, trapoxin A, apicidin, depsipeptide, MS-27-275, butyric acid, phenylbutyrate and arginine butyrate

~~wherein the combination therapy ameliorates the cancer in the patient.~~

2-3. (Canceled)

4. (Currently Amended) The method according to claim 1, wherein the cancer is selected from the group consisting of breast cancer, skin cancer, bone cancer, prostate cancer, liver cancer, lung cancer, brain cancer, cancer of the larynx, gallbladder, pancreas, rectum, parathyroid, thyroid, adrenal, neural tissue, head and neck, colon, stomach, bronchi, kidneys, basal cell carcinoma, squamous cell carcinoma of both ulcerating and papillary type, metastatic skin carcinoma, osteo sarcoma, Ewing's sarcoma, veticulum cell sarcoma, myeloma, giant cell tumor, small-cell lung tumor, gallstone tumor, islet cell tumor, primary brain tumor, acute and chronic lymphocytic and granulocytic tumors, hairy-cell tumor, adenoma, hyperplasia, medullary carcinoma, pheochromocytoma, mucosal neuromas, interstinal ganglioneuromas hyperplastic corneal nerve tumor, marfanoid habitus tumor, Wilm's tumor, seminoma, ovarian tumor, leiomyomater tumor, cervical dysplasia and in situ carcinoma, neuroblastoma, retinoblastoma, soft tissue sarcoma, malignant carcinoid, topical skin lesion, mycosis fungoide, rhabdomyosarcoma, Kaposi's sarcoma, osteogenic and other sarcoma, malignant hypercalcemia, renal cell tumor, polycythemia vera, adenocarcinoma, glioblastoma multiforma, acute myeloid leukemia, acute promyelocytic leukemia, acute lymphoblastic leukemia, chronic myelogenous leukemia, myelodysplastic syndrome, lymphomas, malignant melanomas, and epidermoid carcinomas.

5-12. (Canceled)

13. (Original) The method of claim 1, wherein administering to the patient includes administering the DNA methylation inhibitor and the histone deacetylase inhibitor orally, parenterally, intraperitoneally, intravenously, intraarterially, transdermally, sublingually, intramuscularly, rectally, transbuccally, intranasally, liposomally, via inhalation, vaginally, intraocularly, via local delivery, subcutaneously, intraadiposally, intraarticularly, or intrathecally.

14. (Original) The method of claim 1, wherein the DNA methylation inhibitor is decitabine and is administered intravenously or subcutaneously.

15. (Canceled)

16. (Original) The method of claim 14, wherein decitabine is administered to the patient via an intravenous infusion per day at a dose ranging from 2 to 50 mg/m<sup>2</sup>.

17. (Original) The method of claim 14, wherein decitabine is administered to the patient via an intravenous infusion per day at a dose ranging from 5 to 20 mg/m<sup>2</sup>.

18. (Previously presented) The method of claim 14, wherein decitabine is administered to the patient via an intravenous infusion at a dose ranging from 1 to 50 mg/m<sup>2</sup> per day for at least 3 days per treatment cycle.

19. (Previously presented) The method of claim 1, wherein the cyclic peptide is depsipeptide and is administered intravenously.

20. (Previously presented) The method of claim 19, wherein depsipeptide is administered to a patient by continuous intravenous infusion for at least 4 hours per day for a week at a dose ranging from 2 to 100 mg/m<sup>2</sup>.

21. (Previously presented) The method of claim 19, wherein depsipeptide is administered to a patient by continuous intravenous infusion for at least 4 hours per day for a week at a dose ranging from 5 to 50 mg/m<sup>2</sup>.

22. (Previously presented) The method of claim 19, wherein depsipeptide is administered to a patient by continuous intravenous infusion for at least 4 hours per day for a week at a dose ranging from 5 to 15 mg/m<sup>2</sup>.
23. (Previously presented) The method of claim 1, wherein the butyrate is phenylbutyrate and is administered intravenously.
24. (Previously Presented) The method of claim 23, wherein phenylbutyrate is administered to the patient by continuous intravenous infusion for at least 2 to 3 weeks at a dose ranging from 100-2000 mg/m<sup>2</sup>.
25. (Original) The method of claim 23, wherein phenylbutyrate is administered to the patient by continuous intravenous infusion for at least 2 to 3 weeks at a dose ranging from 250-1000 mg/m<sup>2</sup>.
26. (Original) The method of claim 23, wherein phenylbutyrate is administered to the patient by continuous intravenous infusion for at least 2 to 3 weeks at a dose ranging from 500-800 mg/m<sup>2</sup>.
27. (Original) The method of claim 1, wherein the DNA methylation inhibitor is administered prior to the administration of the histone deacetylase inhibitor.
28. (Currently amended) The method of claim 1, further comprising administering ~~one or more~~ an antibiotic agent.
29. (Canceled)
30. (Original) The method of claim 28, wherein the antibiotic agent is selected from the group consisting of doxorubicin, daunorubicin, epirubicin, idarubicin and anthracenedione, mitomycin C, bleomycin, dactinomycin, and plicamycin.
- 31-43. (Canceled)